



2  
11X SKAPARS

EBC-SP-0091

119  
2/8-7-91

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

Serial No: 641,394

Group: 114-119

In re: Bailey, J.W.; Tucholski, G.R.  
and Huhndorff, H.R.

Filed: 1/14/91

For: Batteries with Tester Label

INFORMATION DISCLOSURE STATEMENT

Hon. Commissioner of Patents & Trademarks  
Washington, D.C. 20231

Sir:

In accordance with 37 CFR 1.51, 1.56 and 1.97 to 1.99, the following is a relevance statement on each citation listed on the attached form PTO-1449, and is made of record to assist the Patent & Trademark Office in its examination of this application:

1. U. S. Patent 4,835,475, issued May 30, 1989 to Hanakura et al., and discloses an apparatus for indicating the electromotive force of a dry battery. The tester comprises a film base, a conductive layer and a thermochromic layer. The tester operates when the ends of the tester are placed in contact with the terminals of a battery.

2. U.S. Patent 4,835,476 issued May 30, 1989 to Kurosawa, and discloses a voltage measuring sheet that has a conductive layer and a temperature-sensitive decoloring type coloring layer placed on a transparent substrate. The sheet operates by contacting the conductive layer with the terminals of a battery.

3. U.S. Patent 4,702,564 and 4,702,563 both issued October 27, 1987 to Parker, and U.S. Patent 4,737,020 issued April 12, 1988 to Parker, and disclose a device for testing batteries. The device

11G 2/23/91  
11X Sta 030  
Skapars  
91 APR 19 PM 12:32  
RECEIVED

comprise a flexible substrate, a conductive layer and a layer of liquid crystal material. When the terminals of a battery are placed in contact with the conductive material, the material heats and this heat is transferred to the liquid crystal material causing it to change color.

4. U.S. Patent 3,667,039 issued May 30, 1972 to Garfein et al., and discloses measuring instruments utilizing liquid crystal materials.

5. U.S. Patent 4,723,656 issued February 9, 1988 to Kiernan et al., and discloses a battery package with an integrally associated voltage indicator. The voltage indicator has contacts for connecting to the terminals of a battery.

6. U.S. Patent 4,497,881 issued February 5, 1985 to Bertolino, and discloses a battery with a window in the side of the housing. It is intended that the components of the battery will visibly change color as the battery is discharged. The consumer can check the color of the components with a color chart to determine the state of utilization of the battery.

7. U.S. Patent 4,801,514 issued January 31, 1989 to Will et al., and U.S. Patent 4,911,994 issued March 27, 1990 to Will et al., and disclose multi-ply labels for batteries. A tester for the battery is not mentioned in these patents.

8. Japanese Kokai Utility Model, HEI 2-41365 published March 22, 1990, and discloses a battery with an indicator to show the remaining amount. The indicator has a high resistance member pasted on the cover member of the battery and a means to display the heat generation at said resistance member.

9. Japanese Published Patent Application 2-100269 published on April 12, 1990, and discloses a battery with a means for indicating

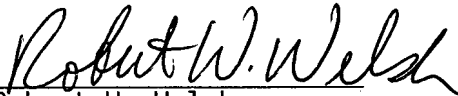
stage of utilization. The indicating means is comprised of a cover member that is peeled off to indicate the stage of utilization.

10. Japanese Kokai Patent, SHO 63-213256 published September 6, 1988, and discloses a battery equipped with a color timer. The battery has a sensor on its surface covered with a coated film.

11. Japanese Patent Application Publication J63179269 published July 23, 1988, and discloses a battery tester. The tester is a thin-film, uniform-width, beltlike resistance heat generation body on a flexible film combined with a heat-sensitive material. The terminals of the tester are placed on contact with the terminals of a battery to test the battery.

A copy of each of these citations is enclosed. Only an abstract of Citation No. 11 is currently available.

Respectfully Submitted;

  
Robert W. Welsh  
Attorney for Applicants  
Reg. No. 31,687

Date: April 10, 1991

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents & Trademarks, Washington, DC 20231

on APRIL 10, 1991  
ROBERT W. WELSH 31,687  
Name Robert W. Welsh Reg. No.  
April 10, 1991 Signature  
Date